



IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES

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Special Waste Authorizations (SWA's)

567 IAC 109

**Provides safe, proper, disposal
management:**

- Threat to human health
- Threat to environment
- Difficult to manage
- Analytical review



Who initiates SWA's?

➤ The Department

- 3 General Special Wastes 567—109.11(455B,455D) PCS, Asbestos, Grit & Bar Screenings
- Unique/Unfamiliar waste issues such as Biodiesel waste, Bakken Oil waste

➤ The Landfill

- Assistance with analytics
- Can they accept it?
- Waste flow
- Special handling

➤ Waste generator

- Familiar with their waste



Why the Concern?

Transfer Station Fire



Transportation issues



Landfill fire



Worker safety: Can toxic wastes sneak in?



SWA denied for 3 reasons:

- It is not a special waste, no special handling is required.
- It is hazardous and cannot be landfilled (Subtitle D MSW landfill) in Iowa.
- A reuse has been found!



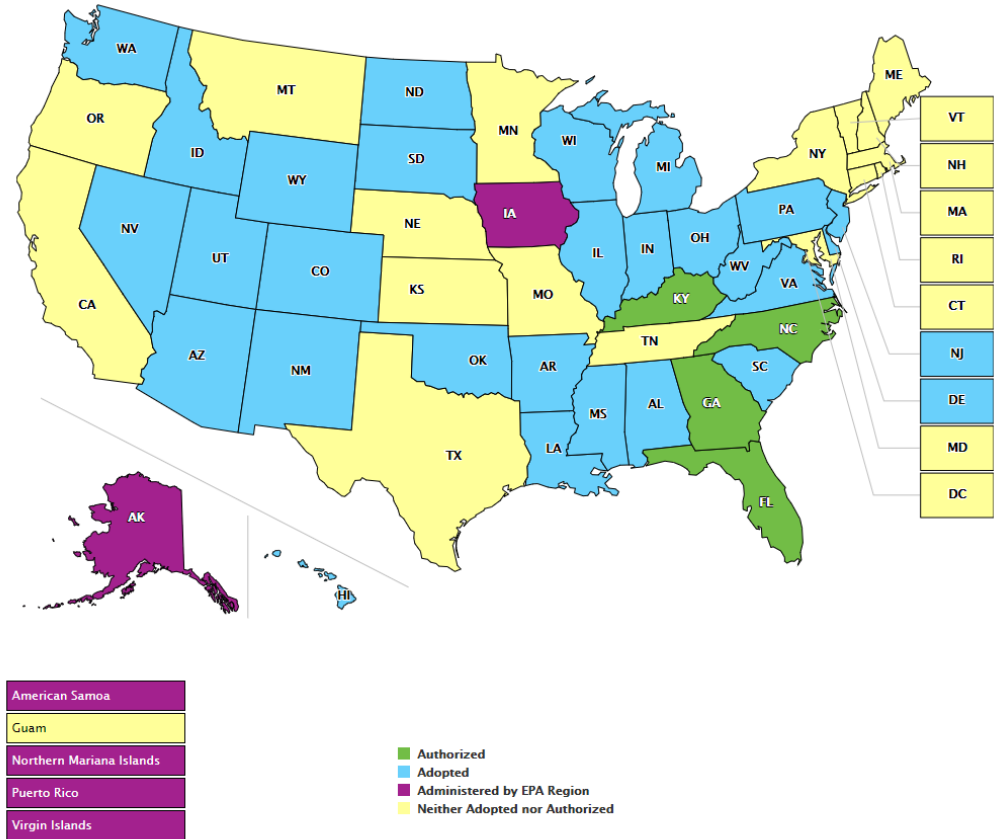
Examples of rule updates

- CRT Rule (2006)
- Solvent Wipes Rule (2013)
- Hazardous Waste Generator Improvements Rule (5/2017)
- Airbag rule (2018)
- Electronic manifest (6/2019)
- Pharmaceutical Rule (8/2019)
- Aerosol Can rule (2/2020)
- Retail Strategy
- Definition of solid waste



Hazardous Waste Generator Improvements Rule

- Includes over 60 changes to RCRA
- Reorganized the regulations
- Effective in Iowa (May 2017)



Last updated on January 21, 2021

Waste Determinations

§ 262.11(a) The hazardous waste determination for each solid waste must be made

- at the point of waste generation,
- before any dilution, mixing, or other alteration of the waste occurs,
- and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

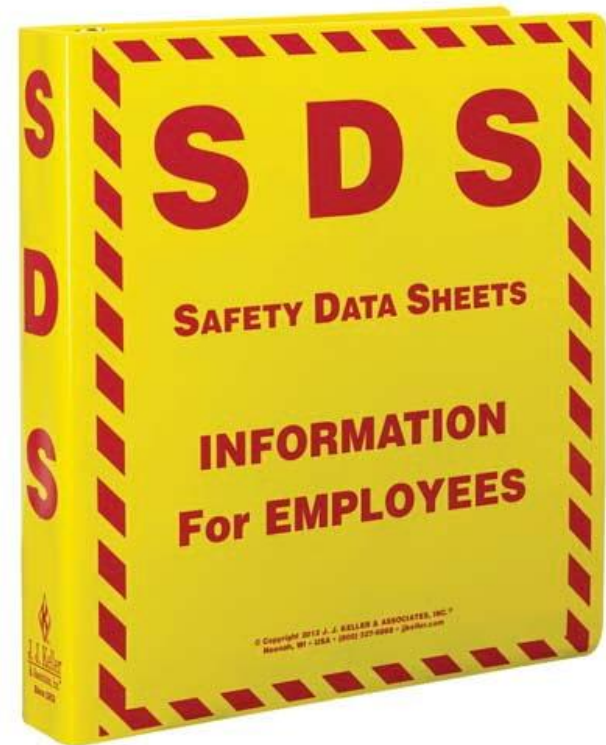
Reviewing MSDS's (now SDS)

MSDS's are not required to list any carcinogenic components under .1% and non-carcinogenic components under 1%.

Do the math:

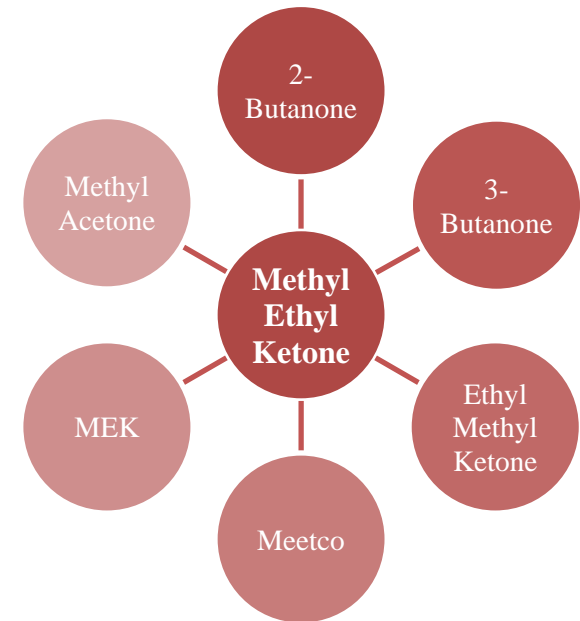
.1% = 1,000 ppm

1% = 10,000 ppm



How it was generated may dictate regulations for disposal

TCLP Metals and Volatile Organic Compounds, Pesticides, Semi-Volatile Organic Compounds and Herbicides					
Metals			Volatile Organic Compounds		
Contaminant	EPA HW #	Regulatory Level	Contaminant	EPA HW #	Regulatory Level
Arsenic	D004	5.0 mg/L	Benzene	D018	0.5 mg/L
Barium	D005	100.0 mg/L	Carbon tetrachloride	D019	0.5 mg/L
Cadmium	D006	1.0 mg/L	Chlorobenzene	D021	100.0 mg/L
Chromium	D007	5.0 mg/L	Chloroform	D022	6.0 mg/L
Lead	D008	5.0 mg/L	1,2-Dichloroethane	D028	0.5 mg/L
Mercury	D009	0.2 mg/L	1,1-Dichloroethylene	D029	0.7 mg/L
Selenium	D010	1.0 mg/L	Methyl ethyl ketone	D035	200.0 mg/L
Silver	D011	5.0 mg/L	Tetrachloroethylene	D039	0.7 mg/L
			Trichloroethylene	D040	0.5 mg/L
			Vinyl chloride	D043	0.2 mg/L
Pesticides			Semi-Volatile Organic Compounds		
Contaminant	EPA HW #	Regulatory Level	Contaminant	EPA HW #	Regulatory Level
Chlordane	D020	0.03 mg/L	o-Cresol	D023	200.0 mg/L
Endrin	D012	0.02 mg/L	m-Cresol	D024	200.0 mg/L
Heptachlor (and its epoxide)	D031	0.008 mg/L	p-Cresol	D025	200.0 mg/L
Lindane	D013	0.4 mg/L	Cresol	D026	200.0 mg/L
Methoxychlor	D014	10.0 mg/L	1,4-Dichlorobenzene	D027	7.5 mg/L
Toxaphene	D015	0.5 mg/L	2,4-Dinitrotoluene	D030	0.13 mg/L
			Hexachlorobenzene	D032	0.13 mg/L
			Hexachlorobutadiene	D033	0.5 mg/L
			Hexachloroethane	D034	3.0 mg/L
			Nitrobenzene	D036	2.0 mg/L
Herbicides			Pentachlorophenol	D037	100.0 mg/L
Contaminant	EPA HW #	Regulatory Level	Pyridine	D038	5.0 mg/L
2,4-D	D016	10.0 mg/L	2,4,5-Trichlorophenol	D041	400.0 mg/L
2,4,5-TP (Silvex)	D017	1.0 mg/L	2,4,6-Trichlorophenol	D042	2.0 mg/L



RCRA Hazardous Waste Codes

- D035 – Ingredient in paint, unknown etc.
- F005 – Used for solvent purposes
- U159 – Pure chemical product

What do I look for when reviewing an SWA?

- Did the waste generator make an accurate waste determination?
- Can the waste be reused?
- Did they mix several or similar waste streams?
- Did they run the correct testing and the correct methods?
- Look up chemical names and CAS numbers
- Listed waste, 'derived from' waste, 'contained in' waste,
- Was there any treatment and do LDR's apply,
- Sampling – did they do enough sampling, grab or composite
- Did they do Totals mg/kg or TCLP mg/L, If using totals, is sample near 100% solid?
- Results in ppm or ppb?
- How will it be delivered to landfill, bags, barrels, loose, etc.
- Did the waste originate in the planning area of generation?
- Did they use a Iowa Certified lab?
- How old is the lab data?
- Did they use an SDS?
- Is it from the correct facility?
- Can I provide them with waste assistance?
- Does the landfill have a SWAC (Special Waste Acceptance Criteria)
- Pass the Paint filter test?
- Weight or Volume of waste, one time or ongoing
- Is it OSHA hazardous? Worker precaution

Resources to Assist Iowa Waste Generators

- Iowa Waste Exchange - IWE
- Iowa Waste Reduction Center - IWRC
- Pollution Prevention Program –DNR
- Special Waste Program - DNR
- Iowa DNR field offices
- EPA Region 7
- Regional Collection Centers for Household Hazardous Waste

